



State Parks and Rural Economic Development

by Joyce Beebe

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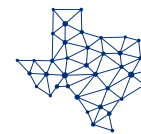
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Background - Outdoor Recreational Activities and Their Economic Impacts

Over the last decade, outdoor recreation has become increasingly important from an economic perspective. Outdoor recreation encompasses not only well-known activities such as fishing, hiking, and boating, but also hunting, skiing, and equestrian activities. At the national level, outdoor recreational activities accounted for roughly 2% of the GDP annually over the last decade.¹ The Bureau of Economic Analysis (BEA) began tracking outdoor recreation-related statistics in 2012 because of the growing contributions of these activities to the U.S. economy. Over time, the BEA data has been used to inform natural resource managers, policymakers, and the public about the significant impact of outdoor activities on the economy.

In Texas, the contribution of outdoor recreational activities as a percentage of GDP generally aligns with the national average of about 2% since 2012. In 2020, this translated to about \$32 billion. These activities also supported 300,000 jobs in 2020, or about 2.4% of total state employment.² The top three industries that have benefitted the most from outdoor recreation in Texas are: (1) retail trade (\$8.5 billion of GDP), (2) manufacturing (\$7 billion), and (3) arts, entertainment, recreation, accommodation, and food services (\$5.5 billion).³

Focusing on State Parks' Impacts at the State and Local Levels

Although the BEA data tracks national- and state-level outdoor recreational statistics because the federal government acknowledges the economic contributions of such activities, such awareness does not stop at the federal level. Many state and local governments also recognize the importance of outdoor recreational activities and the associated economic and non-economic value they provide.

From an economic perspective, outdoor recreation generates financial benefits for local communities by providing employment opportunities, expanding local commerce, and enhancing a location's desirability for companies, employees, and residents—all of which lead to higher tax revenue. Furthermore, outdoor recreational activities generate valid non-economic benefits. Numerous studies support the benefits of outdoor activities on improving individuals' physical and mental health, as well as enhancing connections with friends and families.⁴ From an environmental perspective, public lands such as state parks and nature reserves not only preserve

¹ These activities include: camping, fishing, boating, hunting, outdoor concerts, and activities that support outdoor recreation such as construction, travel, and government expenditures. See Bureau of Economic Analysis, Outdoor Recreation Satellite Account, U.S. and States, 2020, Table 3, November 9, 2021,

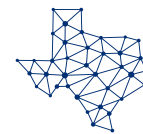
<https://www.bea.gov/sites/default/files/2021-11/orsa1121.pdf>

² Bureau of Economic Analysis, 2020 Texas Outdoor Recreation Satellite Account, last visited: January 2, 2022,

<https://apps.bea.gov/data/special-topics/orsa/summary-sheets/ORSA%20-%20Texas.pdf>

³ The 2020 statistics showed a negative or smaller growth than that of prior years. The BEA indicated the estimates were impacted by the response to the spread of COVID-19 and states' "stay-at-home" orders.

⁴ Jenny Rowland-Shea, Policies to Boost State Outdoor Recreation Economies, Center for American Progress, June 2019, https://cf.americanprogress.org/wp-content/uploads/2019/06/OutdoorRec-report.pdf?_ga=2.134809394.23252653.1638146398-1096081935.1638146398



wildlife habitat, but they also provide conservational benefits such as maintaining air quality and stabilizing the ecosystem.⁵

An important policy area where state governments can exercise meaningful influence over outdoor recreation is the development and improvement of state parks. Various studies have examined the impact of federal public lands and parks on local communities, and they commonly conclude that federal lands and parks provide positive economic benefits, especially for rural counties.⁶

For studies that focused on the economic impacts of state parks at the state and county levels, the conclusions are consistent with those of federal parks. For example, the state of Washington commissioned a study to analyze the economic impacts of state parks on its economy and concluded that expenditures associated with state park visits tended to disproportionately benefit smaller local businesses and rural counties. In addition, state parks are engines of rural economic development. They facilitate tourism by providing critical outdoor recreation assets and attracting significant spending from non-local participants.⁷

The state of Tennessee also recognized that its focus on rural economic development should shift from building industrial parks and highways to harvesting “nature-based” and “heritage-based” tourism. In other words, Tennessee identified its natural and historic resources as assets to facilitate growth in rural counties by appealing to in-state visitors from different regions or cities. The state believes that in-state visitors are less constrained by travel-restricting factors such as economic downturns, epidemics, or terrorist concerns that may deter long-distance travel.⁸ In its most recent strategic plan, the Texas Parks and Wildlife Department (TPWD) also listed encouraging natural and heritage tourism as one of its near-term goals.⁹

Another example is Idaho’s recent decision to invest its budget surplus in state parks, thereby recognizing the parks as important assets for enhancing rural economies.¹⁰ Overall, regardless of

⁵ Johnny Mojica, Ken Cousins, and Angela Fletcher Munoz, Economic Analysis of Outdoor Recreation at Washington’s State Parks: 2020 update, Earth Economics, April 2021, https://static1.squarespace.com/static/561dc6e4b039470e9afc00/t/608b3d2fd3d0c96d255e89c6/1619737911853/WASStateParks_Final_0421-0.pdf

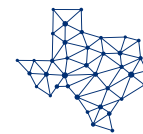
⁶ Ray Rasker, A Summary of Research and Careful Analysis on the Economic Impact of Protected Federal Land, Spring 2017, Headwater Economics https://headwaterseconomics.org/wp-content/uploads/Protected_Lands_Economics.pdf

⁷ Greg Schundler, Johnny Mojica, Tania Briceno, Economic Analysis of Outdoor Recreation at Washington’s State Parks, August 2015, <https://parks.state.wa.us/DocumentCenter/View/5910/State-Parks-Economic-Analysis---Earth-Economics-9-9-15-PDF?bidId=>

⁸ Department of Environment and Conservation, Tennessee 2020: Vision for Parks, People and Landscapes, last visited: December 5, 2021, <https://www.tn.gov/environment/program-areas/res-recreation-educational-services/res-tennessee-2020-plan.html>

⁹ Texas Parks and Wildlife Department, A Strategic Plan for Texas Parks and Wildlife Department: Natural Agenda for Fiscal Years 2021-2025, submitted June 1, 2020, https://tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_a0900_0622_06_20.pdf

¹⁰ Idaho Office of the Governor, “Building Idaho’s Future”: Gov. Little Signs Bill Investing in Outdoor Recreation and State Parks, March 16, 2021, <https://gov.idaho.gov/pressrelease/building-idahos-future-gov-little-signs-bill-investing-in-outdoor-recreation-and-state-parks/>



whether the visitors are from out of state or different regions within the state, Washington, Tennessee, and Idaho’s experiences show that **state parks provide economic benefits to local economies, with rural counties benefitting the most.**

Economic Impacts of Texas State Parks

Based on reviews of available data and references from other states, state parks are not only essential assets to the outdoor recreation economy, but they also catalyze rural economic development. This section focuses on Texas state parks and examines their impact on local economies, especially rural communities.

Economic Analysis Comparing Metropolitan and Rural Counties, by Texas State Park Locations

The first set of economic analysis begins with county-level data and compares several key indicators across metropolitan counties, rural counties with state parks, and rural counties without state parks. The methodology and results of the analysis are summarized below.

In accordance with the Office of Management and Budget (OMB) classification, 82 of the 254 counties in Texas are located in metropolitan statistical areas (MSAs),¹¹ and the remaining 172 are located in non-MSAs (i.e., rural counties).¹² We can therefore cross-reference all Texas state park county-level locations against their MSA status to obtain a list indicating whether a certain county with or without a state park is a metropolitan or rural county.¹³ Out of all state parks, four involve two county-level locations. Therefore, a total of eight counties are labelled as “mixed” status counties.¹⁴

After developing a list of counties by their metropolitan status and state park locations, we used BEA’s county-level economic statistics to derive a set of economic indicators. These indicators include GDP, population, and number of people employed. The most recent data from 2019 was used to ensure timeliness, and the 2009 data was used to allow a long enough interval to observe growth trends for GDP, population, and employment over the decade-long period.

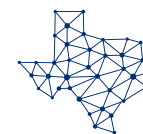
The results of these steps are summarized in **Table 1**. Overall, the key economic indicators of the metropolitan counties generally mirror those of the state averages between 2009 and 2019.

¹¹ According to the definition provided by the Office of Management and Budget (OMB), an MSA is an area consisting of a core county or counties in which lies an urban area having a population of at least 50,000, plus adjacent counties having a high degree of social and economic integration with the core counties as measured through commuting tie.

¹² The list of metro and non-metro county classifications can be found at the following website: Texas Department of State Health Services, Texas Metropolitan Status by County, December 17, 2014, <https://www.dshs.texas.gov/chs/info/current-msa.shtm> (In this report, we only used the metro and non-metro county classification information from this website, not the population data.)

¹³ The specific state park county locations are taken from Appendices B and C of the following report: Ji Youn Jeong and John L Crompton, The Economic Contributions of Texas State Parks, Texas Parks and Wildlife Department, January 2019, <https://www.tpwf.org/wp-content/uploads/2019/02/The-Economic-Contributions-of-State-Parks-2018-Report.pdf>

¹⁴ These are Bandera, Bureson, Cooke, Denton, Lampasas, Lee, Real, and San Saba counties.



However, rural counties with state parks outperformed rural counties without state parks on these indicators. This is measured both by the statistics derived from the indicators themselves and by the number of counties demonstrating a particular economic phenomenon. In other words, **Texas rural counties with state parks have higher GDP growth, higher population growth, and higher employment growth compared to rural counties without state parks.**

Table 1: Key Economic Indicators by State Park Locations across Metropolitan and Rural Counties

| Period: 2009-2019 | | Economic Indicator | | | % of Counties with Growth | | |
|-------------------|--------------------------|--------------------|-------------------|-------------------|---------------------------|-------------------|-------------------|
| # Counties | Metro / Park Status | GDP Growth | Population Growth | Employment Growth | GDP Growth | Population Growth | Employment Growth |
| 78 | Metro | 60% | 18% | 28% | 92% | 86% | 92% |
| 46 | Rural with State Park | 51% | 5% | 10% | 80% | 70% | 72% |
| 122 | Rural without State Park | 45% | 1% | 8% | 71% | 40% | 69% |
| 8 | Mixed with Park | 86% | 32% | 43% | 100% | 88% | 100% |
| 254 | Total State | 59% | 17% | 26% | 80% | 61% | 78% |

Data sources: authors' calculation of BEA county level GDP, employment, and population data.

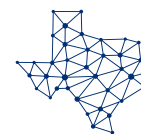
Based on the BEA data, the county-level analysis shows a strong connection between state park location and rural county economic development. In the section below, the second set of economic analysis examines data at the individual state park level and investigates the impacts of state parks on local economies in rural communities.

Economic Analysis Comparing the Economic Impacts at the State Park Level, by Metropolitan and Rural County Status

Park Visit and Visitor Spending Patterns

The significance of state parks to rural communities is apparent from the number of visitors, their visiting patterns (day or overnight, local or non-local visits), and their spending in the local communities during their stays. A report commissioned by the Texas Parks and Wildlife Department (TPWD) summarizes this information. Based on the visitor and spending data, the report estimates each state park's contribution to the local economy in 2018. Because this report does not examine the location of each park or its rural or metropolitan status, our analysis extends the TPWD report to illustrate the effects of rural parks as an economic facilitator to local economies. A second part of the analysis features several parks and the factors identified in other surveys and literature that contribute to the high number of visits to these parks. Finally, we reference recent experiences from Texas and other states to examine potential returns on states' investments in parks.

Approximately 8.6 million people visited Texas state parks in 2018. These visitors can further be filtered by their visiting type (day or overnight—meaning they either visit the park during the day and do not stay overnight, or they stay in the park overnight) and whether they are local or non-local visitors. A non-local visitor means this person lives in a different county from where



the state park is located, or they live at least 20 miles away from the park. All overnight visitors are assumed to be non-local in accordance with the TPWD report.¹⁵

Among the 88 state parks covered by the TPWD report, 40 are located in metropolitan counties, 44 are located in rural counties, and four parks are located in both metropolitan and rural counties. One metropolitan park is excluded for lack of complete information.¹⁶ Similar to the classification used in the first analysis, a state park's location is determined by the county where the park is located, and its metropolitan status is based on the county's MSA status. The visiting information for these parks is summarized in **Table 2**.

Table 2: Summary of Texas State Park Visit Information (2018)

| Calculation | | (A) | (B) | (C) = (A) + (B) | (D) | (E) = (C) + (D) |
|------------------|----------------|---------------------------|-------------------------------|------------------------|--|-----------------|
| # of State Parks | County Type | # of Day Visitors - Local | # of Day Visitors - Non Local | Number of Day Visitors | Number of Overnight Visitors (Non Local) | Total Visitors |
| 39 | Metro Counties | 1,373,692 | 1,262,292 | 2,635,984 | 1,410,894 | 4,046,878 |
| 44 | Rural Counties | 524,091 | 1,458,780 | 1,982,871 | 1,599,931 | 3,582,802 |
| 4 | Mixed Counties | 63,485 | 601,129 | 664,614 | 368,880 | 1,033,494 |
| 87 | | 1,961,268 | 3,322,201 | 5,283,469 | 3,379,705 | 8,663,174 |

Data sources: author's calculation of TPWD report, Appendices B and C data.

Table 2 shows that in general, state parks in all locations (metropolitan, rural, or mixed) are more likely to attract day visitors than overnight visitors (comparing columns C and D in Table 2). However, it is worth noting the different visiting patterns of day visitors to metropolitan parks versus rural parks. Among day visitors, more non-local visitors visit rural parks than metropolitan parks (comparing columns A and B above). This is not surprising considering the location of the rural parks; however, it is important to observe the ability of rural parks to attract non-local visitors.

This pattern is more clearly demonstrated in **Table 3** with percentages. Specifically, about three-quarters of day visitors who visited rural parks were non-local visitors, and only about 26% of people who visited rural parks lived nearby. On the other hand, day visitors to metropolitan parks were generally evenly split between local and non-local status. About half were from close-by areas, and the other half came from non-local areas. **This visiting pattern further demonstrates the contribution of rural parks in attracting non-local visitors.**

¹⁵ Overnight visitors generally spent less than day visitors because they stayed in the park.

¹⁶ San Jacinto Battleground and Monument State Historic Site does not have visitor or spending information. This state park is not included in tables in this section.

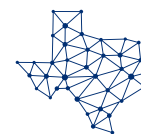


Table 3: Summary of Day Visitors by Local Status

| Calculation | | (A)/(C) | (B)/(C) |
|------------------|----------------|---------------------------|-------------------------------|
| # of State Parks | County Type | % of Day Visitors - Local | % of Day Visitors - Non Local |
| 39 | Metro Counties | 52% | 48% |
| 44 | Rural Counties | 26% | 74% |

Data sources: author's calculation of TPWD report, Appendices B and C data.

The importance of rural parks as magnets for non-local visitors is even more obvious when we take overnight visitors into consideration, because all are non-local visitors. As illustrated in **Table 4**, over 85% of the rural park visitors were not from the local area, whereas roughly two-thirds of metropolitan park visitors were visiting from afar.

Table 4: Summary of All Park Visitors by Local Status

| Calculation | | (A)/(E) | (B+D)/(E) |
|------------------|----------------|---------------------|------------------------|
| # of State Parks | County Type | % of Local Visitors | % of Nonlocal Visitors |
| 39 | Metro Counties | 34% | 66% |
| 44 | Rural Counties | 15% | 85% |

Data sources: author's calculation of TPWD report, Appendices B and C data.

Non-local visitors spent significant amounts of money at local communities when they visited state parks. Their spending included items such as groceries, meals at local restaurants, recreational equipment at local shops, retail goods, gas for transportation, rental cars, and hotel stays, among others. After summarizing all reported and estimated spending across Texas state parks (**Table 5**), we can conclude that **non-local visitors spend more money during their rural park visits than travelers who visit metropolitan parks**. These statistics again demonstrate the large sums of money spent on park-associated visits and the parks' importance to the surrounding rural economies.¹⁷

¹⁷ The analysis separates the local and non-local visitors and emphasizes more on the contribution of non-local visitors. This is because although local residents do visit state parks, their spending does not represent "new funds" entering the local community. Even if they do not spend funds on hotels and rental cars like visitors do, they will spend money on other items and services locally. In other words, the money is spent in the community but just in different categories.

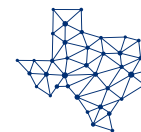


Table 5: Summary of Total Non-local Visitor Spending

| # of State Parks | County Type | Total Day Visitor Spend | Total Overnight Visitor Spend | Total Spend |
|------------------|----------------|-------------------------|-------------------------------|---------------|
| 39 | Metro Counties | \$ 36,567,060 | \$ 19,973,150 | \$ 56,540,211 |
| 44 | Rural Counties | \$ 40,512,137 | \$ 21,873,553 | \$ 62,385,691 |

Data sources: author's calculation of TPWD report, Appendices B and C data.

In addition, it is essential to note that non-local visitor spending during park visits is more impactful to rural counties than to metropolitan counties. A state park might be one of the few natural assets to sustain tourism in rural counties. On the other hand, metropolitan counties not only have attractions including parks, museums, zoos, arboretums, and other recreational facilities, but each of these metropolitan counties is also part of an MSA that forms a larger, tightly connected economic community. Larger urban populations and the greater size of commerce and economic activities in metropolitan areas result in more diverse reasons for visiting, including business, family gatherings, and tourism geared toward arts, education, sporting events, or concerts, in addition to park-based visits.

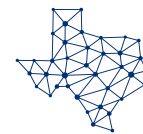
Therefore, it is undeniable that state parks in metropolitan counties generate significant economic benefits. However, rural parks are more likely than metropolitan parks to exercise unique, meaningful economic benefits at the local scale. As such, putting dollar amounts and impacts into local contexts reveals that **the economic contributions of rural state parks are far more consequential to local communities.**

Key Factors Affecting Park Visits

After establishing the economic benefits of parks to local communities—especially rural counties—this section (1) investigates factors that drive tourist visits and satisfaction (i.e., what makes a park popular?) and (2) maps the number of visitors and their spending information for each Texas state park, and reviews a few state parks with high traffic and high visitor-spending against these factors. For rural state parks, we summarize key economic statistics to highlight their potential economic benefits.

Federal and state surveys and associated studies reveal several factors that explain what makes a particular park appealing, or in other words, why people choose to visit certain parks. The U.S. Forest Service's survey results show that most visitors go to a park to participate in **one or multiple activities**.¹⁸ The most common activities include **hiking, viewing natural features, viewing wildlife, and relaxing/escaping heat or noise**. To further support the importance of activity-driven visits, the survey asks what visitors would do if the intended activity at the park was not available during their visit. Over two-thirds of the participants responded that they would go elsewhere for the same activity or come back when the park activity is available. Few say they would leave and go home.

¹⁸ U.S. Department of Agriculture, U.S. Forest Service National Visitor Use Monitoring Survey Results, National Summary Report for Data Collected FY 2016 through FY 2020, last visited: January 6, 2022, <https://www.fs.usda.gov/sites/default/files/2020-National-Visitor-Use-Monitoring-Summary-Report.pdf>



Several state-level surveys show similar factors that attract people to parks. For instance, a survey by the state of Minnesota asked respondents to rank the most important factors to them during park visits regardless of their satisfaction level with these features.¹⁹ The top reasons were **natural landscape, staffing and maintenance of facilities, hiking trails, and signage and information for recreation facilities**. This is largely consistent with the results from the U.S. Forest Service survey and also emphasizes the importance of facility quality and clear information.

When asked what can be improved, the top items were **expanding hiking opportunities, providing more learning opportunities, and offering more programs for children**. This survey also revealed that different age groups may be interested in different activities and priorities: Older visitors preferred to ask park staff questions, whereas visitors under 30 indicated that a staff-led program was not as important to them.

A Texas-based study on national park visits identified geography-related factors that may influence park visits, including a park's **proximity to an MSA with a growing population** and whether a park was **clustered with other attractions** (such as another state or national park). In addition, several other factors may also cause park visitation to fluctuate—including **closed/new exhibits, construction, fees, special events at or near the park, the availability of a hospitality facility nearby, and transportation costs**.²⁰

Similar to the Minnesota survey, the Texas study indicates that different types of parks may appeal to different demographic groups: Parks with strong educational programs may attract families, while accessible trails may be popular for seniors, and the availability of lodging/camping grounds may appeal to groups who prefer staying overnight in parks. As a result, although there are overarching factors that may affect all state parks, it is also important to bear in mind individual parks' characteristics and their connection to the local community.²¹

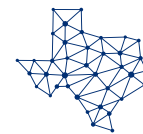
Featured Parks: Mapping High-Traffic and High Visitor-Spending Parks

After identifying potential factors that affect park visits, this section features a few high-traffic parks in both metropolitan and rural counties and reviews whether they demonstrate the recognized factors. To identify parks with high traffic and high visitor spending, we graph the number of non-local visitors and their spending.

¹⁹ Minnesota Department of Natural Resources, 2017 Minnesota State Parks Visitor Survey, The Research Edge, LLC, November 2017, https://files.dnr.state.mn.us/aboutdnr/reports/parks/2017_state_parks_visitor_survey.pdf

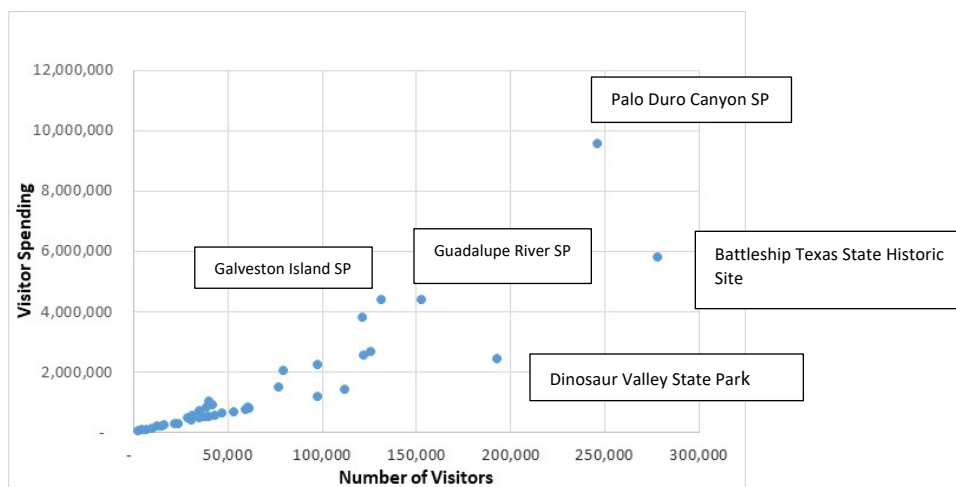
²⁰ Michael A. Schuett, Xiangping "CoCo" Gao and Darrell Fannin, National Park Visitation Trends in Texas (1990-2008), AgrLife Extension, Texas A&M University, <https://agrilifeextension.tamu.edu/library/community-development-parks-recreation-tourism/national-park-visitation-trends-in-texas-1990-2008-2/>

²¹ Texas also conducts annual customer service report on state park visitor experiences. However, the survey does not ask why participants visit the park, or what factors prompt their visits. TPWD, Texas Parks and Wildlife Department, A Strategic Plan for Texas Parks and Wildlife Department: Natural Agenda for Fiscal Years 2021-2025, Schedule H: Report on Customer Service.



Metropolitan Parks

Figure 1: Metropolitan Parks Spending and Visitor Information



In general, the number of visitors and their spending show a positive correlation: The higher the number of visitors, the more they spend. We review several high-traffic/high-spending parks in this section and demonstrate the relationship between high visits and the factors identified.²² Although each park is unique, these factors contribute to their popularity to various extents. For instance, all metropolitan parks have the advantage of being close to an MSA with a sizable and growing population, but some parks attract more visitors than others.²³

Palo Duro Canyon State Park²⁴

As a metropolitan park, this state park is 30 miles from Amarillo and close to several other urban and national attractions in the region. In 2018, roughly 250,000 non-local visitors collectively spent \$9.5 million at the local area when visiting the park. The TPWD website labeled Palo Duro Canyon State Park as the “Grand Canyon of Texas,” as it is the second largest canyon in the country.²⁵ As such, this park has prominent natural features that are attractive to visitors.

In addition to the natural features, there are plenty of activities that are appealing to travelers. Besides hiking, camping, birdwatching, horseback riding, and biking, the park recently added “glamping” to its offerings.²⁶ Each summer, the park also holds the Texas Outdoor Musical at its

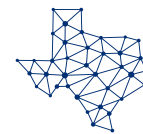
²² The features identified are based on descriptions of Texas Parks and Wildlife Department website.

²³ The Battleship Texas State Historic Site had information in 2018 in TPWD report; however, it has been closed to the public since August 2019. TPWD retains the ownership of Battleship Texas, but the operation and maintenance of the Battleship has been transferred to the Battleship Texas Foundation under a 99-year lease. See <https://battleshiptexas.org/battleship-updates/>

²⁴ Palo Duro Canyon State Park, Texas Parks and Wildlife Department, last visited: January 15, 2022, <https://tpwd.texas.gov/state-parks/palo-duro-canyon>

²⁵ A simple internet search for “the most popular state park” or “the most popular state park in Texas” often has Palo Duro Canyon State Park high on the list.

²⁶ “Glamping” is generally known as glamorous camping, or camping with amenities and comforts.



amphitheater, which includes family friendly performances with stories of early Texas settlers. Overall, this park has many factors that are appealing to visitors: **great natural features (canyon), a wide range of activities, and proximity to a city and other attractions.**

Guadalupe River State Park²⁷

In 2018, Guadalupe River State Park attracted 153,000 non-local visitors who spent \$4.4 million in the area during their park visits. Its proximity to San Antonio makes it accessible and close to many area attractions. Besides typical activities such as camping, biking, and hiking, water-related activities such as fishing, swimming, tubing, and canoeing are signature activities at the park. Educational activities are also popular. As such, this park has multiple features that are attractive to visitors including **great natural features (river), proximity to the city and other attractions, and learning opportunities.**

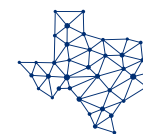
Galveston Island State Park²⁸

In 2018, Galveston Island State Park attracted more than 131,000 non-local visitors who spent \$4.4 million in the local area when visiting the state park. Its proximity to the greater Houston area, a major metropolitan area with over 7 million people, elevates the number of visitors. It features beaches and bays and various water-related activities including paddling, fishing, and swimming. Therefore, its **great natural features (beach), proximity to a city and other attractions, and nearby hospitality facilities** make the park appealing to visitors.²⁹

²⁷ Guadalupe River State Park, Texas Parks and Wildlife Department, last visited: January 15, 2022, <https://tpwd.texas.gov/state-parks/guadalupe-river>

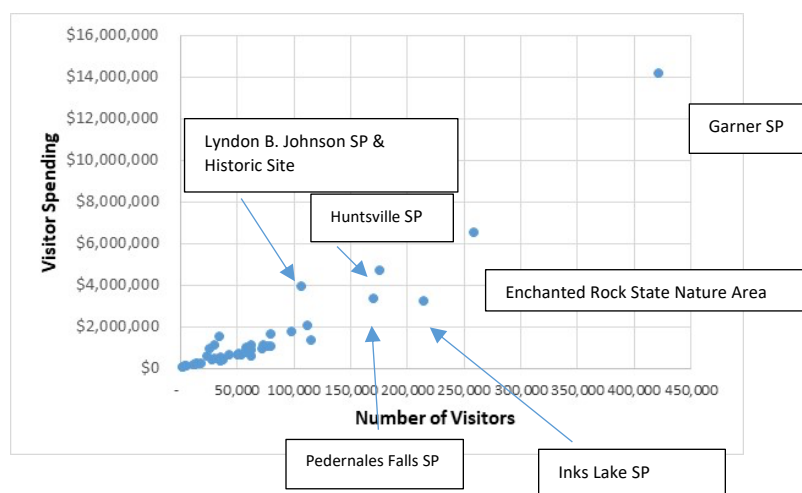
²⁸ Galveston Island State Park, Texas Parks and Wildlife Department, last visited: January 15, 2022, <https://tpwd.texas.gov/state-parks/galveston-island>

²⁹ The figure above does not include Ray Roberts Lake State Park, which is located across two counties (Cooke, a rural county and Denton, a metropolitan county). In 2018, this park attracted 744,530 non-local visitors and they spent more than \$12,645,000 during their visits. This park is about one hour from the Dallas-Fort Worth area, a major metropolitan area with over 7 million people. This park also has attractive natural features, including beach areas surrounding the lake. It has marinas for fishing, boating, and water activities. For details, see Ray Roberts Lake State Park, Texas Parks and Wildlife Department, last visited: January 15, 2022, <https://tpwd.texas.gov/state-parks/ray-roberts-lake>



Rural Parks

Figure 2: Rural Parks Spending and Visitor Information



For rural parks, the number of visitors and their spending similarly demonstrate a positive relationship. We feature several parks below to illustrate how the factors identified above may correlate to their popularity. We also list the key economic indicators of the county where the rural park is located to illustrate the importance of these parks, including growth in **GDP, population, employment, and wages** over a 10-year period.

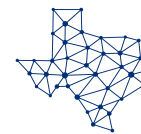
Garner State Park³⁰

[Park Features] Garner State Park is the most visited rural park. In 2018, over 420,000 non-local visitors spent more than \$14 million in the local area around the park. Water activities along the Frio River, such as swimming, fishing, tubing, and paddle boating, are the main attractions. The park also features jukebox dancing as a popular summer activity.

[Location] Located at the rural Uvalde County, Garner State Park is 100 miles from San Antonio and 180 miles from Austin. As such, it is **not very close to major cities**. However, it is surrounded by several other state parks: Lost Maples State Nature Area is 28 miles northeast of the park, Hill Country State Natural Area is 43 miles east of the park, Devils Sinkhole State Nature Area is 65 miles northwest of the park, and Kickapoo Cavern State Park is 100 miles west to the park.

[Economic Highlights] Between 2009 and 2019, Uvalde County's GDP grew by 45%, its population grew by 2%, and its employment grew by 12%. In comparison, as illustrated in **Table 1**, rural counties without state parks on average experienced 45% GDP growth, 1% population growth, and 8% employment growth during the same period. As such, Uvalde County's key economic indicators outperformed the counties without parks. A separate data set from the

³⁰ Garner State Park, Texas Parks and Wildlife Department, last visited: January 15, 2022, <https://tpwd.texas.gov/state-parks/garner>



Bureau of Labor Statistics (BLS) also shows that Uvalde County experienced wage growth of 35% during this period.³¹

Enchanted Rock State Nature Area³²

[Park Features] Enchanted Rock State Nature Area attracted roughly 260,000 non-local visitors who spent \$6.5 million during their visits in 2018. The major attraction, as the name suggests, is the massive pink granite dome that visitors can climb. Hiking, rock climbing, camping, birdwatching, and stargazing are among the range of available activities.

[Location] The town where the park is located, Fredericksburg, provides cultural (German) and historical (National Museum of the Pacific War) experiences, as well as entertainment and hospitality. There are also numerous national and state parks and historical sites nearby: Lyndon B. Johnson National Historical Park, Lyndon B. Johnson State Park and Historical Site (35 miles northwest of the park), Pedernales Falls State Park (60 miles southeast of the park), Blanco State Park (50 miles southeast of the park), Guadalupe River State Park (70 miles south of the park), Longhorn Cavern State Park (50 miles northeast of the park), and Inks Lake State Park (50 miles northeast of the park). Among these parks listed, **Lyndon B. Johnson State Park and Historical Site** (Gillespie County), **Pedernales Falls State Park** (Blanco County), and **Inks Lake State Park** (Burnet County) are also high-traffic/high-spending rural parks listed in **Figure 2** above; **Guadalupe River State Park** was identified as one of the high-traffic parks in the metropolitan area in **Figure 1**.

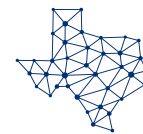
[Economic Highlights] Enchanted Rock State Nature Area is located across Gillespie and Llano Counties, and Burnet and Blanco Counties are adjacent counties. In terms of economic performance, Gillespie County's GDP grew 58%, its population grew 9%, and its employment grew 19% between 2009 and 2019. Wages also increased by more than 63% during the same period. For Llano County, its GDP grew 69%, its population grew 14%, and its employment grew 14% in this period. Annual wages in Llano County also increased by over 46% during this period.

Blanco County, where Pedernales Falls State Park is located, had 76% GDP growth, 16% population growth, and 29% employment growth during the 10-year period. Annual wages in Blanco County grew over 83% in those 10 years. Burnet County, where Inks Lake State Park is located, had 57% GDP growth, 13% population growth, and 21% employment growth. Wages increased more than 61% during this time.

All four counties' GDP growth rivaled that of the entire state of Texas and that of metropolitan counties, which grew by 59% and 60%, respectively, during the same period. As such, these economic indicators show that parks and associated natural assets added significant value to these counties.

³¹ Bureau of Labor Statistics, Quarterly Census of Employment and Wages, last visited: January 13, 2022, <https://www.bls.gov/cew/downloadable-data-files.htm> (The Bureau of Economic Analysis does not report wage data at the county level.)

³² Enchanted Rock State Nature Area, Texas Parks and Wildlife Department, last visited: January 15, 2022, <https://tpwd.texas.gov/state-parks/enchanted-rock>



Overall, the most common factors that drive the success of rural parks, defined by the number of non-local visitors and their spending, include **prominent natural assets** (such as a canyon, river, beach, unique biological or geographic formation, and/or historical importance), **distinguishing activities** (such as music festivals, dance performances, clearly labelled hiking trails, educational opportunities for families, or activities centered around the park's natural assets), and **proximity to other natural assets or hospitality experiences** (such as other parks, historical areas, or cultural experiences). When policymakers invest in state parks, it is important to note that these are the features visitors value.

Rural Park Investment Returns and Growth Potentials

The population of Texas is projected to increase by more than 70%, from 29.7 million to 51.5 million, between 2020 and 2070. The increased population will translate to additional demand for outdoor recreational activities, more visits to state parks, and opportunities for rural economic development. The current state park capacity needs to expand to meet the evolving demographic trends. As such, it is worth exploring what potential economic returns can be expected when additional funds are channeled to state parks.

A good starting point for analyzing the potential return on investment is to reference other states' and Texas' own recent experiences. A survey of literature shows state parks generated a range of returns from **\$4 to \$12** for each dollar invested.

For example, a study found that in Massachusetts, each dollar invested in state parks returned **\$4** for the state economy.³³ The state of Louisiana reported that each dollar spent by the state resulted in \$2.09 of direct spending by park visitors. In addition, every dollar spent by out-of-state visitors generated \$2 of economic benefit for the state.³⁴ At a very high level, this roughly translates to **\$4** of benefits per dollar the state invested. For Texas, according to the TPWD report, each dollar invested by the state generated **\$5.3** dollars in return.³⁵ For Alabama, a study demonstrated it gained a **tenfold return** on the state's investment to the park system.³⁶ In addition, Pennsylvania reported over **\$12** of return for every dollar invested.³⁷ Statistics provided

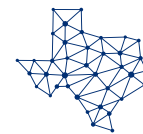
³³ The Trust for Public Land, The Return on Investment in Parks and Open Space in Massachusetts, September 2013, <http://cloud.tpl.org/pubs/benefits-ma-roi-report.pdf>

³⁴ Louisiana Department of Culture, Recreation and Tourism, Louisiana State Parks, 2006 <https://www.crt.state.la.us/Assets/documentarchive/impact-report/State%20Parks.pdf>

³⁵ Ji Youn Jeong and John L Crompton, The Economic Contributions of Texas State Parks, Texas Parks and Wildlife Department. This is calculated as \$130 million state parks budget generated \$688 million in outputs in 2018 (The TPWD study defines "output" as sales minus costs of goods sold). If measured in sales generated (\$891 million), the return is about \$6.9 per \$1 invested; if measured in value-add (\$426 million), the return is approximately \$3.3 per \$1 invested.

³⁶ We cannot locate this particular report. However, the following two summaries both describe the report with consistent numbers. (1) Greg Lein, State Parks Offer Big Return on Investment, Montgomery Advisor, May 13, 2015, <https://www.montgomeryadvertiser.com/story/opinion/contributors/2015/05/13/state-parks-offer-big-return-investment/27251539/> (2) Kelli Dugan, State Parks Pump Up Alabama Economy, Revised Mar 7, 2019, AL.com, https://www.al.com/business/2014/03/state_parks_pump_up_alabama_ec.html

³⁷ Andrew Mowen, Alan Graefe, Nate Trautvein, and Daniel Stynes, The Economic Significance and Impact of Pennsylvania State Parks: An Updated Assessment of 2010 Park Visitor Spending on the State and Local Economy,



by the National Association of State Park Directors indicated that nationwide, state parks provided substantial returns on investment—every dollar invested generated **\$8.7** of economic return for the local community.³⁸ At the national level, the same returns apply for national parks: Numerous sources reported that national parks return more than **\$10** for every \$1 invested.³⁹

The pandemic spurred large demand for outdoor recreational activities. As a result, many states have significantly increased their state park investments over the last two years. Several states have already invested, or have proposed to invest, a substantial amount of their federal stimulus funds to expand their parks' capacities or catch up on maintenance of their state parks. On the other hand, some states used their own revenue or issued bonds to make improvements to their state parks. Many approved or intended investment amounts are substantial: In several states, the additional funds exceeded the annual budgets for state parks.⁴⁰

Sustainability Consideration

So far, we have demonstrated strong analytical support for the economic benefits of rural state parks to the surrounding local community. State initiatives and financial support that promote and develop state parks are the most critical policies for parks to reach their potential. It is also important for policymakers to consider coordinated and balanced policies that advocate sustainable economic development when making investments to enhance and expand state parks. Utah's recent experience provides a good reference.

Geographically, Utah's rural areas are expansive—25 of its 29 counties are considered rural. However, Utah also boasts numerous natural properties, including its well-known five national parks (commonly known as the “Big Five”), 11 national places (such as monuments), and over 40 state parks. In 2019, Zion National Park alone recorded 4.5 million visitors.⁴¹ Between 2015 and 2019, the number of visits to Utah's five national parks increased by 28%. Enabled by states relaxing the shelter-in-place orders, the number of visits to Utah's national parks was expected to

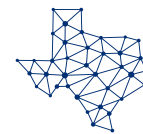
February 2012, <https://protectourparksandforests.org/wp-content/uploads/2021/12/2012-PSU-Study-Economic-Benefits-1.pdf>

³⁸ North Carolina Division of Parks and Recreation, North Carolina Part of National Effort to Protect State Parks, February 15, 2010, <https://www.ncparks.gov/newsroom/press-releases/north-carolina-part-of-national-effort-protect-state-parks> (This number is calculated based on NASPD President's comment that state park visitors in the U.S. created \$20 billion economic impact with the nationwide state park budget of less than \$2.3 billion (20/2.3=8.7)).

³⁹ Amelia Josephson, The Economics of National Parks, Smart Asset, March 18, 2021, <https://smartasset.com/taxes/the-economics-of-national-parks>

⁴⁰ These states include: Alabama (\$85 million), Arizona ([\\$101 million](#)), California (\$500 million), Colorado (\$20 million), Delaware ([\\$7 million](#)), Florida (\$50 million), Indiana (\$60 million), Kentucky ([\\$200 million](#)), Maine (\$50 million), Michigan (\$250 million), Missouri (\$68 million), Montana (24% of marijuana tax revenue), New Hampshire (\$23 million), New Mexico (\$14.5 million), North Carolina (\$170 million), Oregon ([\\$50 million](#)), Pennsylvania ([\\$70 million](#)), Tennessee (\$30 million), Vermont ([\\$22 million](#)), Virginia ([\\$245 million](#)), and Wyoming (\$6.5 million). For states without a source link, see Alex Brown, Flush With Federal Cash, States Invest in Their Crowded Parks, Pew Charitable Trust, June 23, 2021, <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2021/06/23/flush-with-federal-cash-states-invest-in-their-crowded-parks>

⁴¹ According to National Park Services, as of November 2021, over 4.8 million people visited Zion National Park. The number of visitors is expected to exceed 5 million for 2021. See <https://irma.nps.gov/STATS/SSRSReports/Park%20specific%20Reports/Park%20YTD%20Version%201?Park=ZION>



grow substantially in 2021. Available year-to-date data shows the number of visitors to Zion National Park increased by 43% between November 2020 and November 2021.

Overall, tourism represented a big portion of Utah's economy, with one in 11 jobs directly or indirectly supported by traveler spending in 2019. This spending generated an estimated \$1.34 billion in tax revenue for state and local governments.⁴² However, these successful results do not come simply because these parks are located in Utah. Instead, Utah actively develops programs and promotes its state and national parks. In 2019, Utah's Board of Tourism Development allocated \$4.6 million in marketing funds, with additional matching funds available through its cooperative marketing programs. These funds are separate from the state budgets allocated to the maintenance and improvement of the parks.

The Utah Office of Tourism (UOT) in 2019 initiated "What Lies Between," a marketing campaign to promote Utah's state parks that are "in between" its well-known national parks. After the campaign, Utah's state park visitation accelerated. In 2018 6.7 million people visited Utah's state parks, and in 2019 a record number of 7.4 million people visited these parks, an 11% growth.⁴³

Utah's successful investment in its park system generated tremendous economic benefits for the state; however, local residents and businesses in certain gateway cities were overwhelmed by the number of visitors. For instance, the city of Moab, which is close to two national parks (Arches National Park and Canyonlands National Park) and a popular state park (Dead Horse Point State Park), has a population of 5,300. In 2019, about 3.4 million travelers visited these three attractions. This means that on average, for each local resident, there were more than 640 tourists in Moab throughout the year.⁴⁴ This heavy traffic put high pressure on the city's infrastructure, including its parking and roads. It also strained the local tourism industry—there were not enough restaurants, lodging facilities, or recreational supplies to meet all the visitors' needs.⁴⁵ As a result, Moab began its own local campaign—"Do It Like a Moab Local"—to educate and encourage responsible and sustainable travel. It was also the first "sustainable tourism" campaign in the state initiated by a city.⁴⁶

In Texas, Davis Mountains State Park has a visitor-to-resident ratio of 47, the highest among all rural state parks and far below Moab's 640. As such, the more critical issue for Texas rural state parks is for the state government to expand park infrastructure and promote their value to attract visitors. As illustrated above, investing in parks and expanding their capacity can bring substantial returns, even under conservative assumptions. For state parks that are located in rural counties, smart planning when expanding the parks can help identify strategies to sustainably grow the local economy while maintaining community character.

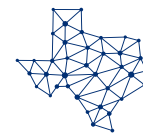
⁴² Jennifer Leaver, *The State of Utah's Travel and Tourism Industry: 2019*, Kem C. Gardner Policy Institute, The University of Utah, September 2020, <https://gardner.utah.edu/wp-content/uploads/TravTourReport-Sep2020.pdf>

⁴³ Utah Office of Tourism, Advertising Campaign, last visited: December 16, 2021, <https://travel.utah.gov/marketing/advertising-campaign>

⁴⁴ Calculated roughly as 3.4 million divided by 5,300.

⁴⁵ Jim Carlton, *Tourists Heeding Utah's "Mighty 5" Campaign Overpower Moab*, Wall Street Journal, September 16, 2019, <https://www.wsj.com/articles/tourists-heeding-utahs-mighty-5-campaign-overpower-moab-11568638923>

⁴⁶ Moab Area Travel Council, Sustainable Tourism, last visited: December 16, 2021, <https://www.doitlikeamoablocal.com/sustainable-tourist>



Conclusion

State parks, and outdoor recreation in general, generate significant economic and non-economic benefits for the surrounding local communities. From a non-economic perspective, outdoor recreation improves individuals' physical and mental health and also generates environmental benefits. From an economic perspective, state parks enhance the surrounding area's desirability for businesses and residents, provide job opportunities, and expand local commerce. All these financial benefits lead to higher tax revenue and resources for building stronger communities. Studies at the federal level and experiences from other states show these outdoor assets attract significant spending from non-local visitors, which disproportionately benefits rural communities.

Our economic analyses show that Texas' experiences are similar. Over the last decade, Texas rural counties with state parks have higher GDP growth, higher population growth, and higher employment growth compared to rural counties without state parks. These results demonstrate the strong connection between state park locations and rural economic development.

In addition, visitor information shows that the vast majority (85%) of rural state park patrons are non-local visitors, which further confirms the value of rural state parks when it comes to attracting visitors and promoting spending in the local economy. Indeed, when it comes to spending, non-local visitors collectively spent more money on visits to rural parks than to metropolitan parks. Putting these dollar amounts into local contexts means that the economic contributions of rural state parks are more consequential to the local communities. Furthermore, given the positive relationship between the number of non-local visitors and their spending, expanding state park capacity in response to the increased demand for outdoor recreation and the anticipated growth of the Texas population can generate meaningful economic benefits.

However, such benefits cannot be accomplished without additional state investment in parks. Studies based on Texas' recent experience and results from other states show that spending on state parks generates significant returns on investments—between \$4 and \$12 for each dollar invested. Many states have already invested substantially in their state parks over the last two years.

Texas state parks will celebrate their centennial in 2023. These state parks are not only economic drivers in rural communities, but they are also highly valuable public assets. There is no better time to make a meaningful investment to commemorate our natural and cultural legacy.